# On some subspecies of the Common Blue Flycatcher Niltava rufigastra (Raffles)

### by A. HOOGERWERF

#### Received 20th January, 1964

A fairly extensive series of this beautiful flycatcher obtained by me from the Sunda Strait area and on the Karimundjawa Islands made it possible to compare fresh material belonging to some different subspecies with each other and with old skins, partly discussed earlier by other authors.

Though there is individual variation in the extent of the light area on the lower under parts, the birds with the lightest abdominal region among the 68  $\varphi_0^{\alpha}$  present in Bogor Museum and studied by me, are found in the series from the Sunda Strait, especially among those of the Krakatau Islands with several skins showing a clear white abdomen. The resemblance to two birds from Sumatra and the Riouw Islands is very striking.

The difference mentioned in the diagnosis of the subspecies rhizophorae known from west Java and Sebesi Island (Sunda Strait)<sup>9</sup>, viz. the brighter ("heller") blue of the upper surface and ferruginous colour of the breast when compared with rufigastra, cannot be confirmed by me when comparing all rhizophorae skins with only three birds of the nominate race before me. I fail to see any difference in the blue of the upper parts and in the brown below between both these forms among which a large series of rhizophorae, obtained from the Sunda Strait area which was included into the range of this subspecies by Chasen<sup>2</sup> and Chasen and Boden Kloss<sup>5</sup>. In their paper on the genus Cyornis (= Niltava) these authors mention six skins in the Bogor Museum from Sebesi Island which differ from birds of the nominate race in being very slightly lighter blue above and in his Handlist Chasen<sup>3</sup> wrote: "We have never seen topotypical rhizophorae, but the Sebesi birds are rather lighter blue above than most examples of rufigastra and we therefore refer them to the Javan form." But, as said above, I failed to see such differences between these subspecies in my material, which makes it probable that they are caused by comparing freshly obtained birds with old material.

Having only those three skins of the nominate race to compare with fresh and old *rhizophorae*, it is impossible for me to decide whether there is indeed enough reason to recognize this later subspecies and if it is correct to include birds from Krakatau and Sebesi Islands into the Javan race instead of uniting them with *rufigastra*. Therefore I have followed Chasen in including Strait Sunda into the range of *rhizophorae*. As I fail to see any difference between birds from Krakatau and Sebesi and those of neighbouring Sebuku and Legundi Islands, I also consider the specimens secured there belong to the Javan subspecies, together with a specimen from Meeuwen Island off Java's most western peninsula, classified also by Chasen as *rhizophorae*.

Besides variations in the plumage of the lower under parts there is some difference in the tint of the tawny colour on flanks, chest and throat, perhaps partly caused by long storage, and in the black on the chin of the males, which makes it impossible to discover any subspecific difference between *rufigastra*, *rhizophorae* and *longipennis*, so far as it concerns the material in my hands. This latter subspecies was described by Chasen and Boden Kloss<sup>5</sup> from the Karimundjawa Islands, principally on account of its larger wing size.

But old as well as freshly collected birds belonging to *karimatensis* from the Karimata Islands (West Borneo) are decidedly darker tawny below in both sexes and there is more black on the chin of the males, which seems enough to justify separation. There is also a considerable amount of variation on the upper surface, making it recommendable to examine a large series before it is justified to consider differences in the blue on those parts as to be of racial significance. Fresh material averages brighter blue than skins which have been stored a considerable time, and fresh skins are likely to be a trifle more vivid tawny below.

The differences in the bluish tint on the upper parts as stated in the diagnosis of *rhizophorae* when compared with the nominate race, leading to Chasen's classification of birds from Sebesi Island as *rhizophorae* could not be seen by me. And fresh as well as old material of our *longipennis* is not duller than *karimatensis* as is stated by Chasen and Boden Kloss<sup>6</sup> but brighter blue and also the differences in colour between *longipennis* and birds of the nominate form, as suggested by Chasen and Boden Kloss<sup>5</sup>, could not be confirmed by me. I could not study enough material of *rufigastra* to give a definite conclusion.

Some variation is present in the colour of the sides of the head and in tint and extent of the clear blue above the eyes and on the forehead, which also makes it rather difficult to consider such differences of subspecific value. This perhaps also applies to the light area on the lores of the females which may differ in individuals from the same locality.

Besides the differences in plumage between *longipennis* and *karimatensis*, as indicated above, there is a rather important difference in wing size of birds of both sexes and individuals belonging to these subspecies differ much in size from *rufigastra* and *rhizophorae*, which also average shorter in the tail. The authors of *longipennis* did not mention this size difference when comparing this race with *karimatensis*, nor did they some years later<sup>1</sup> when discussing a collection of Karimata birds among which 93 and 59 of the latter subspecies, averaging considerably smaller in their wing measurements than *longipennis*. Also in my material size differences between both these subspecies are strikingly present as is borne out by the figures given below.

From our measurements it seems justified to suppose that there is only little individual variation in wing and tail length, for a difference of only 3 mm. in wing and 5 mm. in length of tail in 13 males of *longipennis* may be considered small. There is more variation in bill size, sometimes more than 2 mm. in birds of the same subspecies. From measurements taken by me on much more material than was at the disposal of Chasen and Boden Kloss when describing *longipennis*, it becomes evident that this subspecies not only averages larger in wing but also in tail compared with the other subspecies.

Finally I give some particulars of freshly collected material obtained on the Karimundjawa Archipelago (*longipennis*) and from the islands in and around the Sunda Strait (*rhizophorae*).

All males collected in October on Karimundjawa had heavily developed gonads (max. 8 and 11 mm.) and we found a rather similar situation in the material obtained in June in the Sunda Strait area (max. 7 and 8 mm.).

Vol. 85

Also among the four males secured in May 1926 on the Karimundjawa Islands there were two with large testicles.

All females obtained in June and October in the Sunda Strait region and on the Karimundjawa Islands had very small ovaries, partly not even granular. In October we obtained a fledgling ( $\mathcal{Q}$ ) from the latter locality and there are also two juveniles (also  $\mathcal{Q}\mathcal{Q}$ ) among the small series of May 1926. All these females already had a blue tail. A very young male was collected on Krakatau Island in August. Therefore it seems justified to suppose that the breeding season covers many months.

We failed to find the species on Princes Island where *Niltava banyumas* was rather common, which proved to belong to a new subspecies (Hoogerwerf<sup>8</sup>). On the other islands in the Sunda Strait where we found *Niltava rufigastra*, we did not see *banyumas*. For particulars about the habitat of both these species, so far as it concerns Princes Island and Krakatau I may refer to an earlier paper (Hoogerwerf<sup>7</sup>). *Measurements (in mm.)*:

33 Wing: *rufigastra* (Sumatra): 72, 72, 73; *rhizophorae* (Sunda Strait and West Java): 67, 70, 72, 72, 72, 72, 73, 73, 73, 73, 73, 73, 73, 73, 73, 74, 74, 75, 75; *longipennis* (Karimundjawa Islands): 79, 79, 80, 80, 80, 80, 80, 80, 80, 81, 82, 82, 82; *karimatensis* (Karimata Islands): 76, 77, 77, 77, 78, 78.

Tail: *rufigastra* (Sumatra): 56, 57, 59; *rhizophorae* (Sunda Strait and West Java): 54, 57, 58, 58, 58, 59, 59, 59, 60, 60, 60, 60, 60, 61, 61, 61, 61, 61; *longipennis* (Karimundjawa Islands): 63, 64, 64, 64, 65, 65, 65, 65, 66, 66, 67, 67, 68; *karimatensis* (Karimata Islands): 63, 63, 64, 64, 66, 67.

Culmen: *rufigastra* (Sumatra): 12.1, 12.2, 12.7; *rhizophorae* (Sunda Strait and West Java): 10.7, 11.1, 11.1, 11.6, 11.7, 11.8, 11.8, 11.8, 11.8, 11.9, 12, 12.1, 12.2, 12.2, 12.4, 12.5; *longipennis* (Karimundjawa Islands): 11.3, 11.8, 11.8, 11.9, 12.1, 12.6, 12.7, 12.9, 12.9, 13.3, 13.4; *karimatensis* (Karimata Islands): 11.5, 12.2, 12.5, 12.5, 12.6.

Max., min. and average measurements:

wiux., mm. a	nu uverage med			
	rufigastra	rhizophorae	longipennis	karimatensis
Wing:	72–73	67-75	79-82	76-78
	72.33	72.65	80.38	77.17
Tail:	56-59	54–61	63–68	63–67
	57.33	59.30	65.31	64.50
Culmen:	12.1–12.7	10.7-12.5	11.3–13.4	11.5-12.6
	12.33	11.86	12.43	12.26

99 Wing; *rufigastra:* none; *rhizophorae* (Sunda Strait and West Java): 67, 67, 68, 68, 69, 69, 70, 70, 70, 70, 70, 70, 71, 72; *longipennis* (Karimundjawa Islands): 74, 75, 75, 75, 76, 77, 77, 77, 78, 79; *karimatensis* (Karimata Islands): 70, 71, 74.

Tail: *rhizophorae* (Sunda Strait and West Java): 54, 54, 55, 56, 56, 57, 57, 57, 57, 58, 59, 59; *longipennis* (Karimundjawa): 59, 60, 61, 61,

Bulletin B.O.C.

61, 61, 64, 65, 67, 68; karimatensis (Karimata Islands): 55, 57, 62. Culmen: rhizophorae (Sunda Strait and West Java): 10, 10.9, 11, 11, 11.1, 11.3, 11.5, 11.9, 12.1, 12.2, 12.2, 12.6; longipennis (Karimundjawa): 11.8, 12.1, 12.2, 12.4, 12.6, 12.6 karimatensis (Karimata Islands): 11, 11.8. 11.9.

Max., min. and average measurements:

Wing:	rhizophorae 67–72	longipennis 74–79	<i>karimatensis</i> 70–74
	69.36	76.30	71.67
Tail:	54–59	59–68	55–62
	56.77	62.70	58
Culmen:	10-12.6	11.8-12.6	11-11.9
	11.48	12.28	11.57

Some measurements compiled from literature:

Chasen and Boden Kloss: 5 and 6

longipennis, 33 Wing: 78, 79, 80, 82 (av. 79.75)

♀♀ Wing: 74, 75, 75, 76.5, 77, 79 (av. 76.08) ♂♂ Wing: 71–77; ♀♀ 68–73.

rufigastra,

Boden Kloss and Chasen:<sup>1</sup>

karimatensis, 33 Wing: 74, 75, 76.5, 77, 77, 77, 77, 78, 78 (av. 76.67)

♀♀ Wing: 71, 71, 72.5, 74, 74 (av. 72.50)

References:

<sup>1</sup> Boden Kloss, C. and Chasen, F. N. On a small collection of Birds from the Karimata Islands, West Borneo, Treubia, 14, 1932/34, p. 161.

- <sup>2</sup> Chasen, F. N. On a collection of Birds from the Krakatau group of Islands, Strait Sunda: Treubia, 16, 1937, p. 250/1.
- <sup>3</sup> A Handlist of Malaysian Birds: Bulletin Raffles Museum, Singapore; Vol. 11, 1935, p. 166 (footnote).
- Chasen, F. N. and Boden Kloss, C. On some Birds of the Genus Cyornis; Bull. Raffles Museum, Singapore, no. 2, 1929, p. 34-39.

<sup>5</sup> — A new race of Cyornis from the Java Sea, Treubia, 12, 1930, p. 271.

- On a small collection of Birds from the Karimoen Djawa Islands; Treubia, 14, 1932/34, p. 169.
- <sup>7</sup> Hoogerwerf, A. Notes on the vertebrate fauna of the Krakatau Islands; *Treubia*, 22, 1953, p. 334/5.
- Some ornithological notes on the Smaller Islands around Java (with the description of seven new subspecies); Ardea, 50, 1962, p. 190/92.

<sup>9</sup> Stresemann, Erw. Uber einige Cyornis Arten; Orn. Monats Berichte, 33, 1925, p. 50.

## On a nest of the Yellow-billed Oxpecker Buphagus africanus in Zambia

## by R. J. DOWSETT

Received 5th March, 1965

Benson, Brooke and Vernon (1964) give no breeding record of either the Yellow-billed Oxpecker Buphagus africanus (Linn.) or the Redbilled Oxpecker Buphagus erythrorhynchus (Stanley) from Zambia or